

Claim Amendments:

Applicant requests the following amendments to the claims of record, as follows:

Claims 1-3 (canceled)

4.(withdrawn) The pedal of claim 1, wherein said relative height variability linkage either extends said shoe supporting surfaces sufficiently above, or retracts said shoe supporting surfaces sufficiently below said corresponding clipless shoe bindings, to allow said pedal to be used in either said clipless binding mode, or in said unbound mode, said clipless shoe bindings being fixed in height relative to said pedal spindle axis of said pedal.

Claims 5-29 (canceled)

30. (currently amended) A pedal having:

- (a) a spindle for attachment to a crankarm, said spindle having an axis of rotation,
- (b) at least one means for supporting a rider's shoe on its sole, each said shoe supporting means having at least a first shoe supporting surface located above said spindle, facing a rider's shoe, said first shoe supporting surface being configured to at least partially surround a corresponding:
 - (c) first ~~clipless shoe~~ binding, located above said spindle, also facing said shoe, said first ~~clipless shoe~~ binding being from the group of shoe bindings comprising a mechanism which attaches to a cleat mounted to and recessed within the sole of said shoe, ~~said recess having a depth in a vertical direction,~~
- (d) a second shoe supporting surface on either said first shoe supporting means, or on a second said shoe supporting means, located below said spindle, facing the ground, said second shoe supporting surface optionally being configured to at least partially surround an optional corresponding:
 - (e) second ~~clipless shoe~~ binding located below said spindle, also facing said ground, said second ~~clipless shoe~~ binding also being from the group of shoe bindings comprising a mechanism which attaches to a cleat mounted to and recessed within said shoe sole,

- (f) each said shoe supporting surface having a height defined as the distance from said spindle axis to a first imaginary gauge cylinder, said cylinder ~~fully impressed against~~ tangent to said shoe supporting surface a minimum distance from said spindle axis in the absence of said corresponding binding, said cylinder having a first axis parallel to said spindle axis, said cylinder having a radius of 8 inches,
- (g) each said binding having an uppermost surface or plurality of surfaces, each said binding having a height defined as the distance from said spindle axis to a second imaginary gauge cylinder tangent to said uppermost surface or plurality of surfaces of said binding, said second cylinder having a radius of 8 inches, said second cylinder having a second axis parallel to said first cylinder axis, said second axis lying in the plane defined by said spindle axis and said first cylinder axis,
- (h) means for rotatably connecting all said shoe supporting means to said spindle,
- (i) means for rotatably connecting all said clipless shoe bindings to said spindle, wherein the improvement comprises the addition of:
- (j) a relative height variability means for varying and securely holding the difference ~~in~~ of said heights of said bindings ~~relative to~~ and said heights of said corresponding shoe supporting surfaces ~~to either providing for positioning and securely holding, under significant pedaling shoe force, said heights of said clipless shoe bindings to be at least sufficiently level with or lower~~ generally the same as or less than said ~~height~~ heights of said corresponding shoe supporting surfaces ~~to allow at least said shoe supporting surfaces to securely support said shoe sole without attachment of said sole recessed cleat with either of said clipless shoe bindings, without regard to the position of shoe placement upon either of said shoe supporting surfaces, hereby referred to as an unbound mode of operation, or~~ and providing for ~~to~~ positioning and securely holding, under significant pedaling shoe force, said heights of said clipless shoe bindings ~~sufficiently higher~~ substantially greater than said heights of said corresponding shoe supporting surfaces, ~~by a distance generally equal to or greater than said recess depth, thusly allowing said sole recessed cleat to attach to said clipless shoe bindings, hereby referred to as a clipless binding mode of operation.~~
31. (currently amended) The pedal of claim 30, ~~wherein said relative height variability means is configured to change the~~ having a means for simultaneously varying and securely holding the difference of said relative heights between of all said bindings

and all said corresponding shoe supporting ~~means~~ surfaces simultaneously whereby all said binding heights are generally the same as or less than said heights of all said shoe supporting surfaces, and having a means for simultaneously changing the difference of said heights of all said bindings and all said corresponding shoe supporting surfaces whereby all said binding heights are substantially greater than said heights of all said shoe supporting surfaces, upon a single actuation of said relative height variability means by said rider.

32. (currently amended) The pedal of claim 30, wherein ~~said relative height variability means provides for varying and holding fast said heights of said clipless shoe bindings to be either sufficiently higher than said heights of said corresponding shoe supporting surfaces to allow said pedal to be used in said clipless binding mode, or to be at least sufficiently level with said heights of said corresponding shoe supporting surfaces, to allow said pedal to be used in said unbound mode on both said sides of said pedal,~~ said heights of said shoe supporting surfaces being are fixed.

33. (currently amended) The pedal of claim 30, having additionally, a ~~rider actuatable means for varying the difference in said heights of said clipless shoe bindings relative to said heights of said corresponding shoe supporting surfaces to be substantially zero~~ presetting said relative height variability means to simultaneously change said relative height between all said bindings and all said corresponding shoe supporting surfaces whereby all said binding heights are generally the same as or less than said heights of said corresponding shoe surfaces, ~~to allow usage of said pedal in said unbound mode on both said sides of said pedal,~~ immediately upon ~~release~~ detachment of said cleat from the said clipless shoe binding to which said cleat was engaged, without other actuation by said rider at the time of said cleat detachment.

34. (currently amended) The pedal of claim 30, wherein at least one said shoe supporting surface comprises a plurality of surfaces ~~to form a single shoe supporting surface.~~

35. (previously presented) The pedal of claim 30 wherein at least part of said clipless shoe bindings are continuous with at least part of said relative height variability means.

36.(canceled)

37.(canceled) ~~The pedal of claim 30 wherein said relative height variability means is dimensioned to provide sufficient difference in said heights of said clipless bindings relative to said corresponding shoe supporting surfaces to allow said pedal to be operated in said clipless binding mode without contact of said sole on said pedal.~~

Claims 38-42 (not entered)

43. (new) A pedal having:

- DC
cont
- (a) a spindle for attachment to a crankarm, said spindle having an axis of rotation,
 - (b) at least one means for supporting a rider's shoe on its sole, each said shoe supporting means having at least a first shoe supporting surface located above said spindle, facing a rider's shoe, said first shoe supporting surface being configured to at least partially surround a corresponding:
 - (c) first binding, located above said spindle, also facing said shoe, said first binding being from the group of shoe bindings comprising a mechanism which attaches to a cleat mounted to and recessed within the sole of said shoe,
 - (d) a second shoe supporting surface on either said first shoe supporting means, or on a second said shoe supporting means, located below said spindle, facing the ground, said second shoe supporting surface optionally being configured to at least partially surround an optional corresponding:
 - (e) second binding located below said spindle, also facing said ground, said second binding also being from the group of shoe bindings comprising a mechanism which attaches to a cleat mounted to and recessed within said shoe sole,
 - (f) means for rotatably connecting all said bindings and all said shoe supporting means to said spindle, wherein the improvement comprises the addition of:
 - (g) a relative position variability means providing for varying and securely holding the relative position of each said binding and each said corresponding shoe supporting surface with respect to each other, whereby each said binding has no intersection with a plane parallel to said spindle axis and tangent to said corresponding shoe supporting surface a minimum distance from said spindle axis under normal pedaling shoe sole

pressure, and providing for positioning and securely holding the relative position of each said binding and each said corresponding shoe supporting surface with respect to each other, whereby each said binding substantially intersects a plane parallel to said spindle axis and tangent to said corresponding shoe supporting surface a minimum distance from said spindle axis in the absence of said binding.

44. (new) The pedal of claim 43, having a means for simultaneously changing said relative positions of all said bindings and all said corresponding shoe supporting surfaces with respect to each other, whereby each said binding does not intersect a plane parallel to said spindle axis and tangent to its said corresponding shoe supporting surface a minimum distance from said spindle axis, upon a single actuation of said relative position variability means by said rider, and having a means for simultaneously changing said relative positions of all said bindings and all said corresponding shoe supporting surfaces with respect to each other, whereby each said binding substantially intersects a plane parallel to said spindle axis and tangent to its said corresponding shoe supporting surface a minimum distance from said spindle axis in the absence of said bindings, upon a single actuation of said relative position variability means by said rider.

45. (new) The pedal of claim 43, wherein the position of said shoe supporting surfaces relative to said spindle axis are fixed.

46. (new) The pedal of claim 43, having additionally, a means for presetting, in a cleat engaged pedal state, said relative position variability means to simultaneously change said relative positions of all said bindings and all said corresponding shoe supporting surfaces with respect to each other, whereby each said binding has no intersection with a plane parallel to said spindle axis and tangent to each said corresponding shoe supporting surface a minimum distance from said spindle axis, in the absence of said binding, immediately upon detachment of said cleat from said binding, without other actuation by said rider at the time of said cleat detachment.

47. (new) The pedal of claim 43, wherein at least one said shoe supporting surface comprises a plurality of surfaces.

48. (new) The pedal of claim 43 wherein at least part of said clipless shoe bindings are continuous with at least part of said relative height variability means.

49. (new) A pedal having:

- Di
- (a) a spindle for attachment to a crankarm, said spindle having an axis of rotation,
 - (b) at least one means for supporting a rider's shoe on its sole, each said shoe supporting means having at least a first shoe supporting surface located above said spindle, facing a rider's shoe, said first shoe supporting surface being configured to at least partially surround a corresponding:
 - (c) first binding, located above said spindle, also facing said shoe, said first binding being from the group of shoe bindings comprising a mechanism which attaches to a cleat mounted to and recessed within the sole of said shoe,
 - (d) a second shoe supporting surface on either said first shoe supporting means, or on a second said shoe supporting means, located below said spindle, facing the ground, said second shoe supporting surface optionally being configured to at least partially surround an optional corresponding:
 - (e) second binding located below said spindle, also facing said ground, said second binding also being from the group of shoe bindings comprising a mechanism which attaches to a cleat mounted to and recessed within said shoe sole,
 - (f) means for rotatably connecting all said bindings and all said shoe supporting means to said spindle, wherein the improvement comprises the addition of:
 - (g) a relative position variability means for varying and securely holding the relative positions of each said binding and each said corresponding shoe supporting surface, with respect to each other, whereby each said binding has no intersection with a plane parallel to said spindle axis and tangent to said corresponding shoe supporting surface at the location of minimum distance of said corresponding shoe supporting surface from said spindle axis, under significant pedaling shoe sole pressure, and to position and securely hold the relative position of each said binding and each said corresponding shoe supporting surface with respect to each other, whereby each said binding substantially intersects a plane parallel to said spindle axis and tangent to said corresponding shoe supporting surface at the location of minimum distance of said

shoe supporting surface from said spindle axis, under significant shoe sole pressure.

50. (new) The pedal of claim 49, having a means for simultaneously changing said relative positions of all said bindings and all said corresponding shoe supporting surfaces with respect to each other, whereby each said binding has minimal or no intersection with a plane parallel to said spindle axis and tangent to its said corresponding shoe supporting surface at the location of minimum distance of said shoe supporting surface from said spindle axis, under significant shoe sole pressure, upon a single actuation of said relative position variability means by said rider, and having a means for simultaneously changing said relative positions of all said bindings and all said corresponding shoe supporting surfaces with respect to each other, whereby each said binding substantially intersects a plane parallel to said spindle axis and tangent to its said corresponding shoe supporting surface at the location of minimum distance of said shoe supporting surface from said spindle axis, under significant shoe sole pressure, upon a single actuation of said relative position variability means by said rider.
51. (new) The pedal of claim 49, wherein the position of said shoe supporting surfaces relative to said spindle axis are fixed.
52. (new) The pedal of claim 49, having additionally, a means for presetting; in a cleat engaged state, said relative position variability means to simultaneously change said relative positions of all said bindings and all said corresponding shoe supporting surfaces with respect to each other, whereby each said binding has minimal or no intersection with a plane parallel to said spindle axis and tangent to each said corresponding shoe supporting surface at the location of minimum distance of said shoe supporting surface from said spindle axis, under significant shoe sole pressure, immediately upon detachment of said cleat from said binding, without other actuation by said rider at the time of said cleat detachment.
53. (new) The pedal of claim 49, wherein at least one said shoe supporting surface comprises a plurality of surfaces.

54. (new) The pedal of claim 49 wherein at least part of said clipless shoe bindings are continuous with at least part of said relative height variability means.

Summary of Telephone conversation of Sept. 10, 2003 with Examiner

Applicant requested elaboration regarding the reasons for rejection of claims 30-37, as explained in items 2 and 4 of the Office Action. Regarding the Response to Arguments, Item 4, Applicant agreed that the relative height variability means of claim 30 was erroneously written in an "either/or" syntax which provided only for either (a) bindings to be higher than shoe supporting surfaces or (b) level with or lower than shoe supporting surfaces (but not necessarily both). Applicant then understood the claim rejections under 35 USC §102 listed in Item 2, to be the result of the defective syntax explained in item 4.

Applicant understood Examiner's suggestion to limit recitations of functionality in the claims to the structure and operation of the claimed invention, and not to external elements such as the cylinder of claim 30, or to desired results. Applicant agreed that this was a good suggestion and would work towards removing external references.

Examiner suggested consideration of the use of a plane instead of a cylinder for a gauging surface for defining the present invention over the prior art. Applicant agreed to consider this alternative.